

hTIR1 1 -MLCTARTVETIQLISCOAFACHSTES-----SPDITLPGYVIAIGFPI-----SSCLOWRHR-----PMTILDRSCSINFGYIAFOARLQVBEINISSTAJRPNTHIGYQINDVCSG--SANVYATIRVI 119
 rTIR1 1 MLFWAHILLISQI--VYQVAFSCORTES-----SPFSLPGIILAGHSI-----GDCLOWRHR-----BMTSDRPSDENGCHILFOARFEBEENSSALHPNTHIGYEDIDASE--SANVYATIRVI 118
 hTIR2 1 -GPRATYICSIEF--ELWLAEP--AE-----NSDNLPGDILGGLFSI-----FANKGIVHNFLOVRCK-EYEVKVGGLNLOAMFPAVEINNDSSILPGVILAGYEVIVDQVI--SNNVPMVMEI 115
 rTIR2 1 -GPQNTLCILSI--LJHVLPRKQIVE-----NSDHLAGDVLGGLFI-----FANKVSTLSYLQARCN-EFTMKVIGALNLOAMFPAVEINNOSSILPGVILAGYEVIVDQVI--SNTHPQIMCI 118
 hTIR3 1 ---MLGPAMVIGISWALLHPGTGAPLOIS-----QOLRMKQYMLGGIFPGCEAFEGCLESSTRSSVET---RSSQQLNAILAMKMAVEEINNSILHPCILGMDHETCSPPWAMVMSIMEI 117
 rTIR3 1 ---MPGLAILGISWALLHLCMGSSLOIS-----QOLKACQYMLGGIFPGCTTEHTLNQTONGILIT---RSEPLGLNAILAMKMAVEEINNSILHPCILGMDHETCSPPWAMVMSIMEI 117
 mGluR1 1 MYRLLLIFFPMIFEMSILPRMPDRKVLACASSQSVARMIDQVITIGLFSVHOPPEKYPE-----RQCG--EIREQIGIQORVEAFHTLDKLNADPMILHPNTHIGSETRUSQWHSVALEQSTETI 123

 hTIR1 120 SLPC-----QHHEIIOGLLHVSF-----TILNVIQDSTNRPAFTAMLSFETIMISVASSSTISVROQPSFETIRACKVOYETIMILLOEGNTHISLVSSDITGOLGVAOLENQTGO-G 236
 rTIR1 119 ALQC-----PREHICOMELRNHSS-----KAVAFIGDNDIDHMTVALIGFELNLSVDSWILSARKESELRKIVPSRHOVENWVLOLSEGNWILSLIGSYQDYGOLGVAOLETAVHR-G 235
 hTIR2 116 AHE-----DNLPHQDHSNHS-----RWAVIGDNDSSWMLVANELSLEIDPOITSAISDETRDVRFPALIRPISADHVEAMVQMLHFRMAHITVMSDDYGRNGQILGERVAR-D 231
 rTIR2 119 AOD-----DILLLEILLADYSOMP-----HVAVIGDNDSSWMLVANELSLEIDPOITSAISDETRDVRFPALIRPISADHVEAMVQMLHFRMAHITVMSDDYGRNGQILGERVAR-D 235
 hTIR3 118 AKAG-----SRDIAAYCNYVQVOP-----RVIAVIGCHSSSLIAYWICKFESFETIMPOVSQNSMELLSARETESPSTVPSRVLTAABLLOEGNNAWALCSDDYEGCOLSTIESALNAN-G 234
 rTIR3 118 AKVG-----SOSTAAYCNYVQVOP-----RVIAVIGCHSSSLIAYWICKFESFETIMPOVSQNSMELLSARETESPSTVPSRVLTAABLLOEGNNAWALCSDDYEGCOLSTIESALNAN-G 234
 mGluR1 124 RDSLISRDEKQDNRCLPDGQTLPEGRKKPKTAGVIGCHSSVAINQOLLOJEDIQINLSAISTLSDNTLYAKELHFWESUTLOARMLDIVKRYNTVSAVHTEGNIJESANDPEKELIAOE-G 232

 hTIR1 237 ICTAFQDITMPSAOG-----DER--MCLMBHIAQ-----ACQVIAAFSSROLARMEETSMILNLTGMAVA--SEANLSHITGVGEGIORIQVIGMAKRAVPELKAFAYAR---ADKNARPCHK 354
 rTIR1 236 IQMAKQIUTPSARVG-----DER--MCSMOLIAQ-----ARTVIAAFSSNRHLARMEETSMILNLTGMAVA--SEANLSHITGVGEGIORIQVIGMAKRAVPELKAFAYAR---ADKNARPCHK 353
 hTIR2 232 ICTAQETITLQPNQNTSEERLTVIVKLOO-----STARWAAFSDDLTHHEHEMLKONFIGNWATH--SESWADPVLHNLTELGHILGIFLIGITIOSVPTIRGSEFHEMGPO---AGHPEPLSRTSQ 355
 rTIR2 236 ICTAQDEVILIPESQVMKSEEROLDNIIDKLRR--TSARVAAFSPELSLSEFHEMLKONFIGNWATH--SESWADPVLHNLTELGHILGIFLIGITIOSVPTIRGSEFHEMGPO---AGHPEPLSRTSQ 355
 hTIR3 235 ICTAIEGIVLPRADD-----SRUGKVQDVIHOVNO--SSVQWILIFASVMAHALFNYSSTSSRISPKVAAVA--SEMLTSTIMGLIPGMAQMGVAGFLORGALHEPOMVKTHLA--ITATDPHFCALG 355
 rTIR3 235 ICTAIEGIVLPRADD-----SRUGKVQDVIHOVNO--SSVQWILIFASVMAHALFNYSSTSSRISPKVAAVA--SEMLTSTIMGLIPGMAQMGVAGFLORGALHEPOMVKTHLA--ITATDPHFCALG 355
 mGluR1 253 IQIAHDKIYSNAGEK-----SFDRLIRKIRERLPKRVVACFEGMTVQGLSAMPGLGVVGEFSLIGSGGHHIDDEMIEGIEVEANGGIT-IKLISPEFERSDDIFLKLRLDTNTRNLEPEFWQ 373

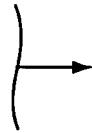
 hTIR1 355 G-----SWQSSNTOREQOAFMAHTMPTIKAFS-----MSSNANAVAVAVAHGHILQILGOA-----SCACSIR-GRVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 466
 rTIR1 354 G-----SWQSSNTORECHETITRMPTIKAFS-----MSSNANAVAVAVAHGHILQILGOT-----SEIQSR-CPVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 465
 hTIR2 356 S-----YTG--NODQVCLNATISFNTITRISG-----ERWISVSAVAVAHAAHLSLIGOD-----STQTK-RVAVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 465
 rTIR2 360 R-----TTQ--NODQVCLNATISFNTITRISG-----ERWISVSAVAVAHAAHLSLIGOD-----STQTK-RVAVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 465
 hTIR3 356 EREGLEEDVVGQPOPODCITLQNVSAGLN-----HHDTFSVAAVAVAVAHAAHLSLIGOD-----STQTK-RVAVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 469
 rTIR3 355 -AELDLERVMGPPQSQDYIMQNLSSGIMONLSAGOLHEQILFATVAVAVAVAHAAHLSLIGOD-----STQTK-RVAVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 471
 mGluR1 374 HR-----FQCLPGLHLLNPAVKKVCTGNESTEEENVYQ--DSVNGFJNATVAVAHGHILQILGOA-----SCACSIR-GRVYPAQIILQIILKVNHL--FHKTIWAFNDNRPLSSNITITANDNCPKW-TITVL 497

TO FIG. 1B

FIG. 1A



FROM FIG. 1A



hTIR1 467 GSSTWSPVQININETKLOWHEDKDAVVPKGVSSDCTEGHOR-WLGHHCOCFCVPCOGGFEIN-KSLYRCOPCEKEEMAPEGSGCTPTMVAALFHTSAVIAANTITIEATLIGTAGIEFAWHLDT 594
 rTIR1 466 GSASLSPVHLDINKLEOWHEDKDAVVPKGVSSDCTEGHOR-WVSGHHCOCFCVPCOGGFEIN-MSELHIPOCCFEEWPKESSTFCPTMVAALFHTSAVIAANTITIEATLIGTAGIEFAWHLDT 593
 hTIR2 466 ASVYPLOQIKN-IQDISMHTVANNITPMSCRSKSCGCK-KVGLVCCOFOIDLPCHINHTDEVECONPNNSVOSLSCTROLYLEWHDAPIAVADAAGCTLSIAIMVFNRFQI 593
 rTIR2 470 ASVSPSKRTY-INNVSMHTVANNITPMSCRSKSCGCK-KVGLVCCOFOIDLPCHINHTDEVECONPNNSVOSLSCTROLYLEWHDAPIAVADAAGCTLSIAIMVFNRFQI 597
 hTIR3 472 GRN-GSLRTER--IKTWHESDAQEPVSRCSROCGOVR-RVKGHSICQYDAVDCGSGRO-NPDDIATETEGODENSPSTRCERRSRRLAWGEPAMITLILSLATGIMTAANGSERVHERDS 596
 rTIR3 479 GTN-GTLQLOH--SNMYPG--ADVEPASCSROCKGOVR-RVKGHSICQYDAVDCGSGRO-NPDDIATETEGODENSPSTRCERRSRRLAWGEPAMITLILSLATGIMTAANGSERVHERDS 601
 mGluR1 498 GTWH--EGVLDYDKLEQMK--SGMVRSVCSFPLKGOIKVIRKGVSCOMCTACKENEFVQ---DEHTQRAQDLGMPNAELTGGEPFVYLENDIESITIAFESQIGIMLFEVTLIELYNDI 620

 hTIR1 595 PAVRSAGRLAFLMIGSLAAGSLVGEFCEPFRPACTIKOALHAIQFHTLHSCILVASFOLITIEFESTRPTFTTHAMVONFGAGLEFWM-TSSAACILITOTLWLMWTPHAP-RPVORFPHIMTECTE 722
 rTIR1 594 PAVRSAGRLAFLMIGSLVAGSOSFSEFCEPFRPACTIKOALHAIQFHTLHSCILVASFOLITIEFESTRPTFTTHAMVONFGAGLEFWM-TSSAACILITOTLWLMWTPHAP-RPVORFPHIMTECTE 721
 hTIR2 594 PAVRSAGPVCFTMHTLIVAYMVPVAGPFRKSTCIGQALFPLQFHTLHSCILVASFOLITIEFESTRPTFTTHAMVONFGAGLEFWM-TSSAACILITOTLWLMWTPHAP-RPVORFPHIMTECTE 722
 rTIR2 598 PAVRSAGPVCFTMHTLIVAYMVPVAGPFRKSTCIGQALFPLQFHTLHSCILVASFOLITIEFESTRPTFTTHAMVONFGAGLEFWM-TSSAACILITOTLWLMWTPHAP-RPVORFPHIMTECTE 726
 hTIR3 597 FLVQASGHIACFGLVQELVNCISLITPQSPARCIAQOPLSHPIPGCSITILEQAAEIEVESELPLSWADRLSGCLRGPMWIMWL-LAMLEVALQITWIEVAPPEVV-TDWHMUTHEALVHCRT 724
 rTIR3 602 FLVQASGHIACFGLVQELVNCISLITPQSPARCIAQOPLSHPIPGCSITILEQAAEIEVESELPLSWANWLSYLLGPMWIMWL-LAMLEVALQITWIEVAPPEVV-TDWHMUTHEALVHCRT 729
 mGluR1 621 PAVKSSRELQVLIITAGILELGVCPFTLAKETITTSOILQRLINGLSSAMQVSNLVTKTNRTARTLAGSKKICITRKPRFMSAMQVLTASLILSVOITLAVLTIIMPPPEI-LSVESIK-EMVITQNT 748

 hTIR1 723 TNSGLHIAFLNGLISAFACSLGCKDLPFNVEAKQVIESLLENVSWPAETITASMDQMLPANWAGLSSISSGGGGELPKQVITLCRPDINSTHFOASTODVTRCGST----- 841
 rTIR1 722 WNSGFLAFLNGLISAFACSLGCKDLPFNVEAKQVIESLLENVSWPAETITASMDQMLPANWAGLSSISSGGGGELPKQVITLCRPDINSTHFOASTODVTRCGST----- 840
 hTIR2 723 NVRNHIFNTSDILLISVCSFAVWGKELPTVNEAKHETITSTVEYFESSLOTFMSMSVAVITIMDLITVNTNLAISIGVFGPKCMHIFTYPERNTPAYENSMIOGTMRD----- 839
 rTIR2 727 NVRNHIFNTSDILLISVCSFAVWGKELPTVNEAKHETITSTVEYFESSLOTFMSMSVAVITIMDLITVNTNLAISIGVFGPKCMHIFTYPERNTPAYENSMIOGTMRD----- 843
 hTIR3 725 RSWSGHIAFLNGLISAFACSLGCKDLPFNVEAKQVIESLLENVSWPAETITASMDQMLPANWAGLSSISSGGGGELPKQVITLCRPDINSTHFOASTODVTRCGST----- 852
 rTIR3 730 RSWSGHIAFLNGLISAFACSLGCKDLPFNVEAKQVIESLLENVSWPAETITASMDQMLPANWAGLSSISSGGGGELPKQVITLCRPDINSTHFOASTODVTRCGST----- 858
 mGluR1 749 SN-LGVVAPVGNGLISAFACSLGCKDLPFNVEAKQVIESLLENVSWPAETITASMDQMLPANWAGLSSISSGGGGELPKQVITLCRPDINSTHFOASTODVTRCGST----- 845

FIG. 1B